

# PATENT SPECIFICATION

739,405



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## COMPLETE SPECIFICATION

### Cap Nut

We, ALLMANNA SVENSKA ELEKTRISKA  
AKTIEBOLAGET, a Swedish Company, of  
Vasteras, Sweden, do hereby declare the in-  
vention, for which we pray that a patent may  
be granted to us, and the method by which  
it is to be performed, to be particularly de-  
scribed in and by the following statement:—

Hitherto known cap nuts have been manu-  
factured from bar material by turning and  
thread-cutting. Apart from the fact that much  
material is wasted by such a method of manu-  
facture, the time of manufacture is also long,  
especially due to the fact that each nut has  
to be screw-threaded individually. The pre-  
sent invention relates to a cap nut which  
may be manufactured considerably more  
cheaply than hitherto, and the invention is  
characterised in that the nut is a common open  
nut having a cap made from sheet metal se-  
cured at one end by projection-welding. Since  
normal cheap methods may be used in the  
manufacture of the nuts and since the caps  
can be fabricated cheaply by pressing or  
drawing, the manufacturing costs of the cap  
nuts according to the invention are much  
lower. In addition, the quantity of material  
required for the cap is considerably less than  
in the case of cap nuts turned from a solid  
workpiece.

In the accompanying drawing Figure 1  
shows a cap nut according to the invention,  
Figures 2 and 3 show two steps in the manu-  
facture of one form of the cap, and Figure  
4 shows a modified form of the cap. The  
cap may be manufactured by punching cir-  
cular discs from sheet metal, which are there-  
after pressed or stamped into the required  
convex or hemi-spherical shape. At the same  
time the cap is provided with a flange 2  
projecting laterally, i.e. at a right angle to the  
cap axis the outer edge of which flange may  
be bent as shown in Figure 3 in a separate  
manufacturing operation, so that an axially  
extending edge 3 is obtained. The cap is then

projection-welded on one end of a nut 4, the  
edge 3 causing a concentration of current at  
the contact surface between the cap and the  
nut 4, which facilitates the welding process.

In the embodiment of the cap shown in  
Figure 4, the required concentration of current  
is obtained by providing the flange 2 with  
a downwardly directed ridge 5.

In the manufacture of cap nuts according  
to the invention, a considerable amount of  
both material and working time is saved. It  
is especially advantageous that, in manufactur-  
ing cap nuts according to the invention,  
common nuts manufactured by mass-produc-  
tion may be used. The welding of the caps  
gives a joint which does not require finish-  
ing to give the nut a neat appearance.

What we claim is:—

1. A cap nut consisting of a common nut  
having a sheet metal cap fixed on one end  
by projection-welding.

2. A cap nut as claimed in claim 1, where-  
in the cap is a sheet metal punching formed  
into convex shape by pressing.

3. A cap nut as claimed in claim 1 or  
2, wherein prior to fixing the cap is pro-  
vided at the edge with a flange projecting  
substantially at a right angle to its axis, the  
outer edge of said flange being bent down-  
wardly so that it is substantially parallel with  
the axis of the cap.

4. A cap nut as claimed in claim 1 or 2,  
wherein prior to fixing the cap is provided  
at the edge with a flange projecting sub-  
stantially perpendicular to its axis, said flange  
being provided with a downwardly directed  
ridge.

5. A cap nut substantially as herein des-  
cribed with reference to Figures 1 to 3 or  
Figures 1 and 4 of the accompanying draw-  
ing.

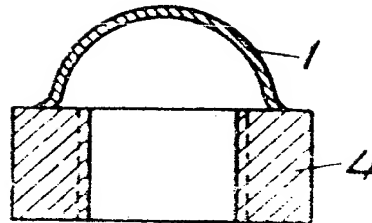
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739,405 COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of  
the Original on a reduced scale.

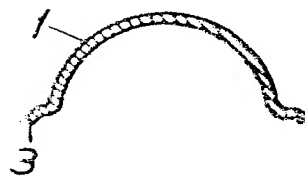
*Fig.1*



*Fig.2*



*Fig.3*



*Fig.4*

